

## CLAIMS

What is claimed is:

1. A method for developing firmware, the method comprising:  
defining a framework for firmware to be developed by firmware developers at different design centers;  
at least one of said firmware developers developing firmware as at least one component within said framework; and  
depositing said at least one component within a repository that is accessible from all of said design centers, wherein said repository includes contextual information about said at least one component deposited therein.
2. The method of claim 1 wherein said framework comprises one selected from the group consisting of:  
an IA-32 architecture framework, an IA-64 architecture framework, a PA-RISC architecture framework, a MIPS architecture framework, a SPARC architecture framework, a 64-bit AMD OPTERON architecture, and an ALPHA architecture framework.
3. The method of claim 1 further comprising:  
allowing said developers of said different design centers to join as members of a cooperative.
4. The method of claim 3 wherein said cooperative permits said members to access said at least one component deposited within said repository and use said at least one component for autonomous development of firmware within their respective design center.
5. The method of claim 3 wherein said cooperative permits each of said members access to said repository to retrieve said at least one component from said repository.
6. The method of claim 3 wherein said cooperative permits each of said members access to said repository to deposit one or more firmware components that comply with said framework.

7. The method of claim 1 wherein said different design centers comprise at least one selected from the group consisting of:

high-end server design center, workstation design center, personal computer design center, laptop computer design center, and handheld computer design center.

8. The method of claim 1 wherein said different design centers comprise design centers for different computer platforms.

9. The method of claim 1 wherein said contextual information about said at least one component comprises:

genealogy information for said at least one component.

10. The method of claim 9 wherein said contextual information further comprises at least one selected from the group consisting of:

(a) identification of at least one platform in which said at least one component has been deployed, (b) explanation of reasons said at least one component evolved, (c) explanation of problems and solutions for evolution of said at least one component, (d) references to inventions that said at least one component embodies, (e) indication of a health factor of said at least one component, (f) process recipes for how to test or validate said at least one component as a unit or within a system, and (g) identification of one or more authors or reusers of said at least one component.

11. The method of claim 1 wherein if said at least one component was derived from another component in said repository, said contextual information about said at least one component comprises:

information identifying said another component in said repository from which said at least one component was derived.

12. A business method for development of firmware across a plurality of design centers, said business method comprising:  
defining a framework for firmware to be developed at different design centers;  
developing firmware as components within said framework at at least some of the design centers;  
depositing said components within a repository that is accessible by all of said design centers, wherein said repository includes contextual information about said components deposited therein.

13. The business method of claim 12 further comprising:  
allowing firmware developers of said different design centers to join as members of a cooperative, wherein said cooperative permits said members to access said components deposited within said repository and use said components for autonomous development of firmware within their respective design center.

14. The business method of claim 13 wherein said cooperative permits said members to use said components deposited within said repository for development of different platforms.

15. The business method of claim 13 wherein said cooperative permits said members to use said components deposited within said repository for development of firmware components that are not required to comply with the defined framework.

16. The business method of claim 12 wherein said framework comprises a general-purpose processor architectural framework.

17. The business method of claim 12 wherein said different design centers comprise at least one selected from the group consisting of:

high-end server design center, workstation design center, personal computer design center, laptop computer design center, and handheld computer design center.

18. The business method of claim 12 wherein said different design centers comprise design centers for different computer platforms.

19. The business method of claim 12 wherein said contextual information about said components comprises:  
genealogy information for said components.

20. A system comprising:  
a plurality of different design centers communicatively coupled by a communication network to a repository, said repository accessible by firmware developers of the design centers;  
and  
wherein said repository stores firmware components and contextual information for the firmware components.

21. The system of claim 20 wherein said contextual information for the firmware components comprises:  
genealogy information for said firmware components.

22. The system of claim 20 further comprising:  
a defined framework with which said firmware components comply.

23. The system of claim 20 wherein said repository permits said firmware developers to access said firmware components deposited therein and use said firmware components for autonomous development of firmware within their respective design center.

24. The system of claim 20 wherein said repository permits each of said firmware developers access thereto to deposit one or more firmware components that comply with a defined framework.

25. The system of claim 20 wherein said repository is distributed across the plurality of different design centers such that each design center has access to a local image of the firmware components and contextual information stored in the repository.